

MEMORANDUM

Subject: Retranslation from Russian back into English of the phrase "...if such explosion causes radioactive debris to be present..." in the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Underwater

The first three words of this phrase in the Russian text are the exact equivalent of the corresponding three words in the English text, and the phrase itself is structured in exactly the same manner in both texts.

The verb "causes" appears to be a good rendition of the Russian "vyzyvaet", although that verb might have been rendered more literally to provide a more faithful reflection of the prefix "vy" and the root "zyv" or "zv", in which case it would read "evokes" or "calls forth".

The adjective "radioactive" is exactly the same in both texts, except for the adjectival ending in the Russian which is necessary for the declension of that adjective. In the Russian text it is in the genitive plural.

For the portion of the phrase "causes radioactive debris to be present" in the English text the Russian text reads literally "evokes the falling out of radioactive deposits". If the Russian text were read less literally with respect to the word "deposits", the rendition would be "evokes the falling out of radioactive fall-out". In fact, the most authoritative English-Russian dictionary on the subject of nuclear physics (ENGLISH-RUSSIAN DICTIONARY OF NUCLEAR PHYSICS AND ENGINEERING, Shpolsky, E. V., editor, Academy of Sciences of the USSR. Institute of Scientific Information, Moscow. 1955.), renders, on page 200, "radioactive fall-out" as "radioaktivnye osadki", which were the Russian words used (in the genitive case, plural number) in the Treaty. But the most technically accurate rendition makes for redundancy in English.

The word "osadkov" in the Russian text of the portion "falling out of radioactive deposits" (vypadenie radioaktivnykh osadkov) of the phrase under discussion deserves separate treatment. Here the genitive plural "osadkov" has been used of a noun whose nominative singular is "osadok",

which is

State Dept. review completed

- 2 -

which is best rendered in the singular in all Russian-English dictionaries as "sediment" (the "sad" root of "osadok" and the "sed" in sediment are obviously cognates) or "deposit", but which can also be rendered, depending on the context, as "residue", "dregs"; "tails"; "sludge"; "deposition", "precipitate", "precipitation"; "after-taste"; "feeling of resentment". In the plural the noun "osadok" by itself, or with the adjective "atmospheric" (atmosfernye - nominative case, plural number) can be rendered as "precipitation" or "rainfall". The use of the genitive singular of the word "osadok" following the noun "vypadenie" can also be rendered as "precipitation".

The noun "vypadenie" used in the Russian text also deserves special attention. It can be rendered as "falling out", "falling", "fall", "precipitation", "precipitate", "deposit"; and, in medical parlance, "prolapsus" (e.g. of the uterus).

In Shpolsky's authoritative English-Russian dictionary for nuclear physics, which has been mentioned above, both "vypadenie" and "osadki" are given (on page 89) as the Russian equivalents of the English word "fall-out". This same dictionary (on page 199) gives three Russian renditions for "radioactive deposit", namely "radioaktivnyi osadok", "radioaktivnoe otlozhenie", and "radioaktivnyi nalot". And as for "debris" (on page 61) this dictionary gives three Russian words as equivalents, "1) oskolki, oblomki; 2) razvaliny", none of which lends itself readily to use with the adjective "radioactive".